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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,821	01/24/2001	Maximilian Angel	51162	2188

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EXAMINER
WELLS, LAUREN Q

ART UNIT	PAPER NUMBER
1617	12

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/767,821	ANGEL ET AL.	
	Examiner	Art Unit	
	Lauren Q Wells	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-11* is/are pending in the application.

4a) Of the above claim(s) *6-9 and 11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 1-3, 6-11 are pending. Claims 6-9 and 11 are withdrawn from consideration, as they are directed to non-elected subject matter. The Amendment filed 1/7/03, Paper No. 11, amended claims 1 and 7 and added claims 10-11.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/7/03 has been entered.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 2/9/00. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-3, 10, drawn to a process for preparing graft copolymers of polyvinyl esters, classified in class 526, subclass 210.

II. Claims 6 and 9, drawn to a cosmetic comprising graft copolymers of polyvinyl esters, classified in class 424, subclass 401.

III. Claims 7 and 11, drawn to graft copolymers of polyvinyl esters, classified in class 514, subclass 5-6.

IV. Claim 8, drawn to coating agents comprising graft copolymers of polyvinyl esters, classified in class 427, subclass 214.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II, III, IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make the starting materials of foamed substances, such as sponges.

Inventions III and II, IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a protective colloid for dispersion polymerization and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions II and IV are distinct. Inventions are distinct if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different

functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case a cosmetic is distinct from a coating agent. A cosmetic is applied to keratinous substances to provide a beneficial effect, whereas a coating agent is applied to a substrate for purposes of protection.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Herbert Keil on 3/7/03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-3 and 10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-9 and 11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(i) The phrase "optionally substituted" in claims 1 and 7 (line 18) is vague and indefinite, as it is confusing. Does this phrase refer to the –(CH2)t- or to the arylene? Furthermore, what chemical substituents are encompassed by this phrase. The specification does not define this phrase and one of ordinary skill in the art would not be apprised of its meaning.

(ii) The phrase "where appropriate" in claim 1, is vague and indefinite, as it is confusing. What does "where appropriate" mean? What is appropriate? The specification does not define this phrase and one of ordinary skill in the art would not be apprised of its meaning.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 922,459 in view of Wu et al. (5,338,814).

The instant invention is directed process for preparing graft copolymers of polyvinyl esters by polymerization of a vinyl ester of C1-C24 aliphatic carboxylic acids in the presence of polyethers of formula (I), and where appropriate, at least one other monomer using a free-radical initiator system.

GB '459 teach a process for the manufacture of modified polyvinyl alcohols. It is disclosed that it is known to make polyvinyl alcohols by subjecting a graft polymer prepared from one or more vinyl esters and a compound copolymerizable with those vinyl esters, on a polyalkylene glycol under the influence of a free radical forming polymerization initiator.

Example 1 discloses a process for preparing a graft polymer comprising heating a solution of vinyl acetate, polyethylene glycol and a free radical initiator (dibenzoyl peroxide), and adding the residual portion of the solution in a drop-wise manner after the polymerization had set in. The reference discloses its graft copolymer for use in cosmetic products. The reference fails to teach a liquid polyalkylene glycol having a MW between 88 and 1000. See pg .1-pg. 3, line 35; pg. 4-pg. 5.

Wu et al. teach a process for making narrow molecular weight distribution polyvinylpyrrolidone K-90 polymers. PEG-300 is taught as a chain transfer agent that functions by terminating a growing chain by providing a more labile hydrogen atom to the growing chain to control the molecular weight distribution of the polymer obtained. PEG-300 provides an alternative termination process which is not expected to be hindered by viscosity buildup during polymerization, thus preventing the growth of high molecular weight molecules and reducing the breadth of the distribution. See Col. 1, line 34-Col. 2, line 61.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to teach the PEG of '459 as PEG-300, as taught by Wu et al., because of the expectation of achieving a process of making graft copolymers of polyvinyl esters, wherein the molecular weight distribution of the copolymer is controlled and reduced, and wherein the termination process is not hindered by viscosity buildup.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is (703) 305-1878. The examiner can normally be reached on M-F (7-5:30), with alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (703)305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

lqw
March 18, 2003

SREENI PADMANABHAN
PRIMARY EXAMINER 3/19/03